

Claims

What is claimed is:

1. A self regulating rotor comprising:
 - at least two cups that are each pivotally attached about a central axis such that they form a three dimensional shape when closed, and when rotated into an open orientation form an s-shaped rotor, when viewed as a horizontal cross section;
 - a cup shafts attached to each cup such that the cups can rotate from a closed shape to an open s-shaped rotor;
 - at least one end plate is attached to the end of said cup shafts, wherein said cup shafts are pivotally supported by said end plates;
 - a central shaft connecting said end plates on said central axis;
 - a rotational energy connecting element attached to said cup shafts, for controlling simultaneous rotation of said cup shafts; and
 - a rotational speed sensor connected to said rotational energy connecting element for sensing the speed of rotation of said central shaft and for activating said rotational energy connecting element to rotate said cup shafts in response to changes in said sensed speed of rotation of said central shaft.
2. A rotor according to claim 1, further comprising a rotor clutch element attached to the rotor, which uses the rotational energy of the rotating rotor to close rotor cups into a closed shape.

3. A rotor according to claim 1, further comprising a housing enclosing said self regulating rotor, said housing having intake and output openings.
4. A rotor according to claim 1, wherein said rotor has an adjustable diameter.
5. A rotor according to claim 1, wherein said central shaft is hollow.
6. A rotor according to claim 1, further comprising a braking device attached to the rotor, for slowing the rotation of the rotor.